

Date: Thursday, 18/10/2007 3:25:46 PM  
User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services  
Job Number : 34269  
Estimate Number : 12576  
P.O. Number : *N/A*  
This Issue : 18/10/2007 S.O. No. : *N/A*  
Prsht Rev. : NC  
First Issue : 27/08/2007 Type : LARGE FAB ASSY  
Previous Run : 34026

Drawing Name : STEP WELDMENT

Part Number : D3562041  
Drawing Number : D3562 UNDER REVIEW  
Project Number : N/A  
Drawing Revision : A  
Material : *N/A*  
Due Date : 07/09/2007 Qty: 6 Um: Each

Written By : \_\_\_\_\_  
Checked & Approved By : \_\_\_\_\_  
Comment : Est Rev: A New Issue 06-11-09 JLM

### Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D2622120C Extrusion



Comment: Qty.: 1.0000 Each(s)/Unit Total: 6.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	<i>34694</i>

Check Material for any Dents or Defects

D2734 206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:	Qty	Part Number	Description	Batch
	2	D2734	End Cap	

3.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion as per Dwg D3562

2-Deburr and bevel ends for welding

3-Weld (1) end cap as per Dwg D3562 & QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod

4-Grind end cap welds flush as per Dwg D3562

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
07/10/08	160	ADD A STEP to pre heat the step to allow for Alalun Endcaps after welding before Powder coating. 15min @ 320°C to Dry off excess water					07/10/08	
07/10/12								

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 18/10/2007 3:25:47 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07-11-01 (6)

Checked on Hercules

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

UHA 07-11-01

PD 07-11-08 (6)

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

07-10-01 6

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

07-11-01 (6)

8.0

D3560041

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

ARM WELDMENT

334474 = 4

335029 = 2

07-10-05 6

9.0

D3560043

ARM WELDMENT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

ARM WELDMENT

Batch: 334476

07-11-05 6

10.0

MS20600AD4W5

Blind Rivet



Comment: Qty.: 36.0000 Each(s)/Unit Total : 216.0000 Each(s)

Blind Rivet

batch: m106074

07-11-05 6

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Drill Rivet holes as per dwg D3562.

Touch-up rivet holes with alodine as per dwg d3562

Rivet legs using Magnabond as per dwg D3562.

07-11-05 6

07-11-06 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 18/10/2007 3:25:47 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

Ensure to wipe off any excess magnabond of the step

A/R Magnabond 6398

Batch:

*Salv*

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

13.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld Remaining end cap as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod

2-Grind end cap welds flush as per Dwg D3562

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

*See Step 5.0*

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

*6 07/11/08*

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*touch up alodine pressure wash*  
*M 105914*

*FL 07/11/08*

*M 04-11-07*

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3562 and QSI 005 4.4

Batch: *m/06030*

*FL 07/11/09*

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

*7/11/12 SP 64*

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 18/10/2007 3:25:47 PM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

Job Number: 34269

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

D2808

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 12.0000 Each(s)  
Spacer

B 32890

20.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

21.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

22.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1  
Package as step weldments only  
\*\*do not assemble\*\*

23.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



11-11-13

21.1) pick 2x D2734 end caps (scan @ sequence 2.0)  
B 34485

11-11-06 6

21.2) - weld end caps per drawing D3562 & QSI 004.

- inspect for foreign objects.

Aluminum Rod A/R B M105058

11-11-06 6

- grind flush

11-11-07 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

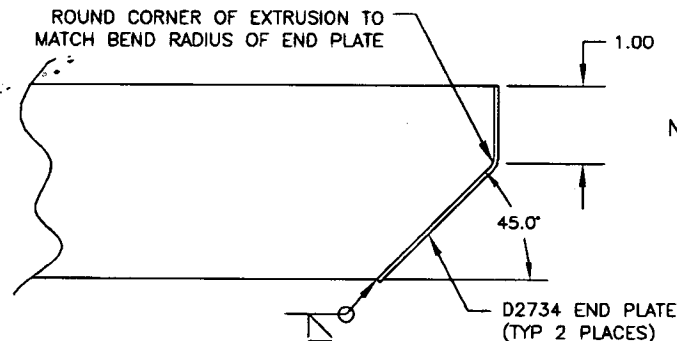
**NOTE:** Date & initial all entries



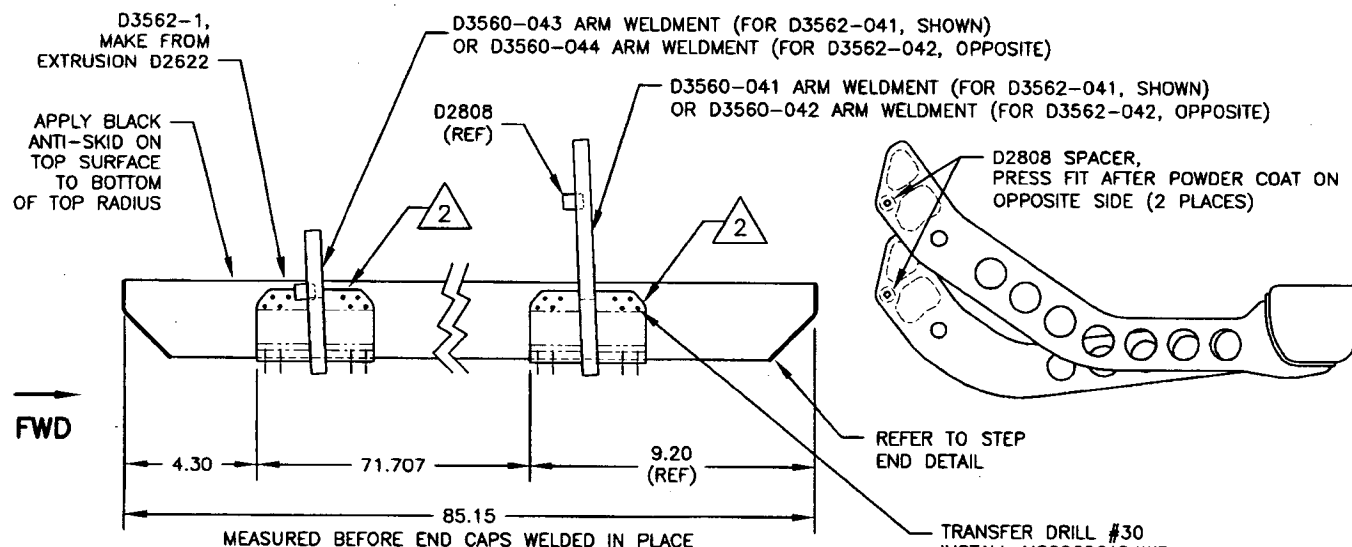


RELEASED  
07.06.24

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



**TYPICAL STEP END DETAIL**  
NOT TO SCALE



**D3562-041 LH STEP ASSEMBLY (SHOWN)**  
**D3562-042 RH STEP ASSEMBLY (OPPOSITE)**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 3) WELD PER DART QSI 004
- 4) FINISH:
  - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
  - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3. TOUCH UP ANY UNFINISHED MAGNOBOND WITH PAINT PER DART QSI 005 4.2
  - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 5) ALL DIMENSIONS ARE IN INCHES

DESIGN	DRAWN BY	DART AEROSPACE LTD
07.06.19	06.09.26	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
07.06.19	07.01.15	D3562
DATE	TITLE	SHEET 1 OF 1
07.06.19	STEP ASSEMBLY	SCALE
A	NEW ISSUE	NTS
B	ARMS NOW RIVETED TO STEP	
C	NOW MAGBND, ADD D2808, RMV 4 RVTS	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries